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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,331	07/29/2003	Atsushi Nishio	02410337AA	6085
30743	7590	02/20/2004	EXAMINER	
WHITHAM, CURTIS & CHRISTOFFERSON, P.C. 11491 SUNSET HILLS ROAD SUITE 340 RESTON, VA 20190			GILMAN, ALEXANDER	
			ART UNIT	PAPER NUMBER
			2833	

DATE MAILED: 02/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/628,331	Applicant(s) NISHIO ET AL.	
	Examiner Alexander Gilman	Art Unit 2833	

-- Th MAILING DATE of this communication appears on th cov r sh et with the correspond nc address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 July 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1, 3, 5, are rejected under 35 U.S.C. 102(e) as being anticipated by Howell.

With regard to claim 1, Howell (US 6,328,574) discloses (Fig. 7) a connector, comprising:

a connector body (10), having an inner side face defining a chamber which accommodates the module body, the chamber formed with an opening from which the module body is inserted;

a first, conductive terminal (20a), provided on the inner side face such that a conductive member formed on an outer periphery of the module body is brought into contact with the first terminal in a case where the module body is completely accommodated in the chamber;

and a second, grounding terminal, (20b) provided on the inner side face and operable to be brought into contact with the conductive member of the module body,

wherein the second terminal is provided at a portion closer to the opening than the first terminal,.

2. Claims 1, 3, 4, are rejected under 35 U.S.C. 102(b) as being anticipated by Perkins et al.

With regard to claims 1 and 3, Perkins et al(US 5,398,154) disclose (Fig. 2) a connector, comprising:

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a connector body (14), having an inner side face defining a chamber which accommodates the module body, the chamber formed with an opening from which the module body is inserted;

a first, conductive terminal (34,36), provided on the inner side face such that a conductive member formed on an outer periphery of the module body is brought into contact with the first terminal in a case where the module body is completely accommodated in the chamber;

and a second, grounding terminal, (70,72) provided on the inner side face and operable to be brought into contact with the conductive member of the module body,

wherein the second terminal is provided at a portion closer to the opening than the first terminal

With regard to claim 4, Perkins et al discloses the second terminal is formed with a protrusion which engages with the module body in a case where the module body is plenary accommodated in the chamber.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Howell et al in view of Grabbe et al.

Howell et al disclose all of the limitations except for the chamber having a rectangular cross section when viewed from the opening; and the first terminal and the second terminal being provided on each of four inner side faces designing the chamber.

Grabbe et al disclose (Fig. 5) the chamber having a rectangular cross section when viewed from the opening; and the terminals being provided on each of four inner side faces designing the chamber.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to arrange the Howell et al socket as the chamber having a rectangular cross section when viewed

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from the opening and the terminals being provided on each of four inner side faces designing the chamber, as taught by Grabbe et al, to utilize the Howell et al connector with modules having four side leads.

2. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Howell et al in view of the admitted prior art.

Howell et al disclose all of the limitations except for using the connector with a camera module

The admitted prior art discloses (Fig. 4, 5) using the connector with a camera module

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to arrange the Howell et al socket for using the connector with a camera module, as taught by the admitted prior art, to extend the applicability of the Howell et al connector.

Any inquiry concerning this communication should be directed to Alexander Gilman at telephone number (571) 272-2004. The examiner can normally be reached on Monday-Friday, 10:30 a.m. - 8:00 p.m.

1/31/04

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01/30/2004

A handwritten signature in black ink that reads "Alex Gilman". The signature is written in a cursive, flowing style.

**ALEXANDER GILMAN  
PRIMARY EXAMINER**